AIRREX
For a Happy & Healthy Life

AIRREX AIR CONDITIONER

USER'S MANUAL

HSC-2500 / HSC-3500

- ▶ Thank you for purchasing an AIRREX AIR CONDITIONER. BEFORE operation please read this user's manual carefully.
- ▶ Keep this manual readily to hand.
- ▶ It is ESSENTIAL that you read the 'NOTES ON SAFETY' carefully before use and follow them at all times.
- ▶ This Air Conditioner is specified for use on a 220/240V. 50Hz. single phase power supply and fitted with a 13amp.UK three pin plug. For use outside the UK you must check that the local electricity supply is the same and have the appropriate plug fitted by a qualified electrician.
- ▶ The Warranty form is on Page 15. Please complete it now and keep in a safe place.
- ▶ We have a policy of continual improvement to our products. The contents (features and specifications) in this manual are therefore subject to change without notice.

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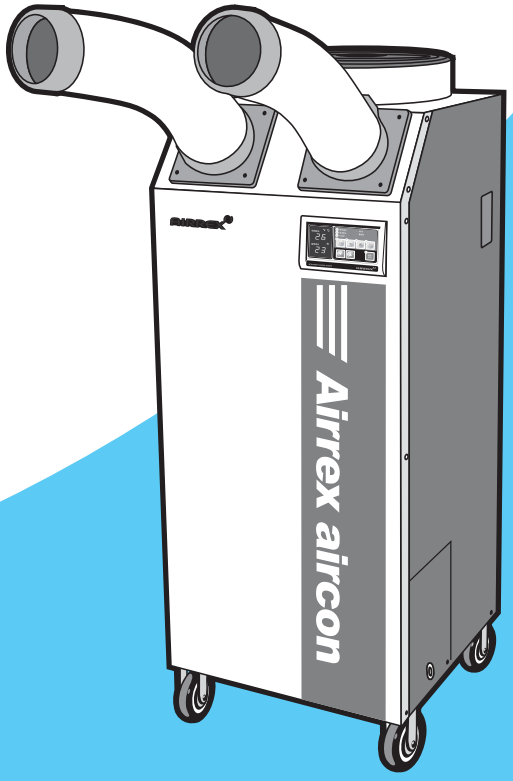

HEPHZIBAH CO.,LTD.

WARRANTY

(Applicable to first retail purchaser only)

AIRREX AIR CONDITIONERS give more reliable performance, comfort and durability the more they are used. They are built under a strict quality assurance regime which includes inspection both during and after production and exhaustive reliability testing.

In the unlikely event you have any problems, please contact your dealer or distributor. If the problem is as a result of a production fault or failure, repairs will be undertaken free of charge during the period of warranty subject to the following warranty conditions:

1. The warranty period is 12 months from the date of first purchase.

2. If the problem has been caused by customer error or misuse, abuse or damage, then all repairs will be charged for.

3. This warranty applies to the UK mainland ONLY.

4. Proof and date of purchase must be supplied.

5. Please complete the details below and keep this warranty in a safe place.

6. All transport charges back to the dealer are at the customers cost. Keep all original packaging to facilitate return. Return to customer will be at dealers cost (if genuine warranty claim).

DESCRIPTION	AIRREX AIR CONDITIONER		
MODEL	HSC-2500 / HSC-3500		
DATE OF PURCHASE		PRODUCT SERIAL NO:	

Warranty Period	( ) Months	Price Paid UK£.
DISTRIBUTOR	Name of Company	
	Telephone No.	

	Name :
	Address :
	Telephone :

HEPHZIBAH CO.,LTD.
423-5 CHUNGCHUN-DONG, BUPYUNG-KU
INCHEON, KOREA
TEL : +82-32-509-5834
FAX : +82-32-502-5519
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Website : www.airrex.co.kr

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SAFETY INSTRUCTIONS

The following instructions are for ensuring the user's safety and to prevent any physical injury or material damage. Please read carefully and follow all instructions.

There are two sections to these instructions: WARNING and CAUTION.

The following symbols are for your guidance:

☒ = You must NOT . ☑ = You MUST .

WARNING

- ☑ Use a 230V. 50Hz. 1 phase power supply only.
  (Wrong supply may cause a fire and / or shock hazard)
- ☑ Securely plug into an earthed supply.
  (Unless earthed, may cause electric shock)
- ☒ Do not use a damaged power cable, plug or socket.
  (Short, fire or shock hazard)
- ☒ Do not remove plug by pulling cable or with wet hands.
  (Risk of fire and electric shock)
- ☑ Before cleaning, remove plug from socket.
  (Otherwise risk of electric shock)
- ☒ Do not place anything on top of the machine.
  (This could cause electric shock, malfunction or injury)
- ☒ Do not use an extension lead unless of the approved type.
  (Heavy duty, Risk of fire and / or electric shock)
- ☑ Ensure mains plug is clean and securely plugged in.
  (Otherwise it may short causing smoke and fire)
- ☑ Ensure correct (13 amp) fuse is fitted in the plug.
  (Otherwise malfunctioning or fire may result)
- ☒ Do not 'kink' or sharply bend the power cable nor put any weight on it.
  (The insulation may be damaged causing fire and/ or electric shock)
- ☒ Do not turn off by removing power plug. Always turn off at control panel first.
  (Risk of electric shock and / or malfunction)
- ☒ Do not use this cooler on unstable or inclined surfaces. Always use on solid flat floor.
  (Risk of falling causing injury, fire or malfunction)

☺ Keep this manual in a visible location near the cooler for easy reference.

SAFETY NOTICE

CAUTION

☒ Do not place cooler on uneven, unstable or inclined surface.
(This could cause malfunction)

☑ When storing the cooler, ensure that it is kept in a dry, cool place.
(To prevent corrosion and malfunction)

☑ If not being used for some time or if lightening is present, always unplug from mains.
(To prevent risk of electric shock, short circuit or fire)

☒ Do not spray water on to the cooler nor use solvents such as benzene, thinner or alcohol for cleaning.
(There is a risk of electric shock and / or short circuit)

☑ If the power cable is damaged this must be replaced by a fully qualified electrician.
(To avoid danger of electric shock, short circuit or fire)

GENERAL ADVICE BEFORE USE

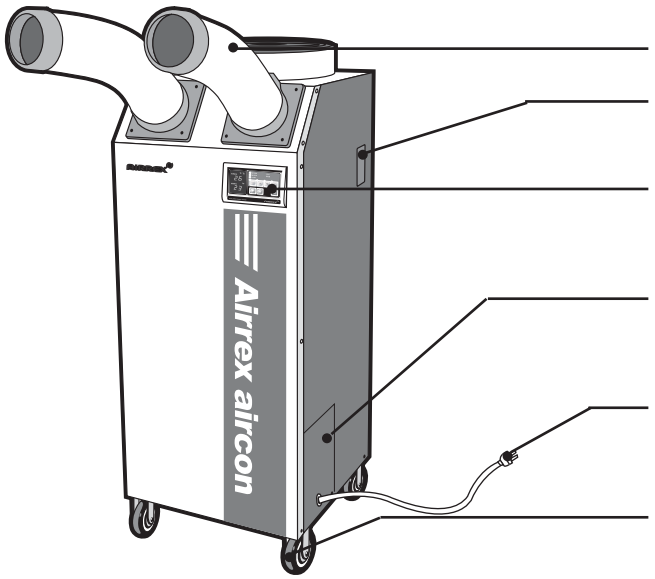
· Ensure the safety of the location in which cooler is to be used.
· Ensure the floor or ground is smooth and sound.
· Ensure you allow at least 50cm air space all around the cooler.
· When in position LOCK the casters to prevent rolling.
· Never use the cooler at more than 2° incline

FOR MAXIMUM EFFICIENCY

· In airtight areas use vertical exhaust into ceiling.
· If possible locate exhaust outlet through a window or door to outside.
· Exhaust ducting should be no longer than 2m for maximum efficiency.
· Ensure correct electricity supply.

EXTERIOR DESCRIPTION

FRONT VIEW



FLEXIBLE DUCT OUTLET (COLD AIR)

HANDLE

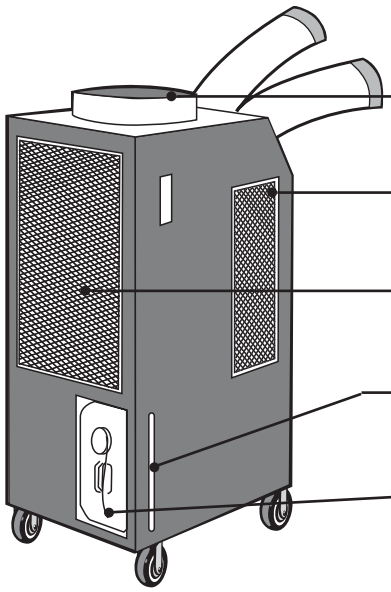
DIGITAL CONTROLLER

ELECTRIC PANEL
(ACCESS BY AUTHORISED SERVICE PERSONNEL ONLY)

POWER PLUG

CASTERS (FRONT LOCKABLE)

BACK VIEW



CONDENSER OUTLET (HOT AIR)

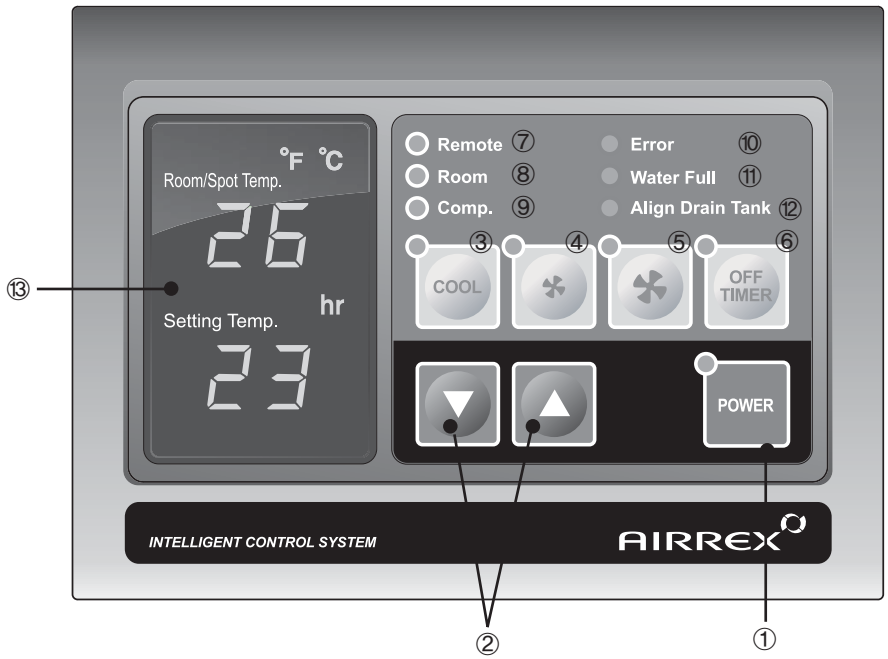
EVAPORATOR FILTER
AMBIENT AIR INTAKE.

CONDENSER FILTER

WATER LEVEL INDICATOR
TO CHECK WATER LEVEL OF THE CONDENSATE TANK.

CONDENSED WATER TANK
TO COLLECT WATER GENERATED DURING COOLING.

CONTROL PANEL FUNCTIONS



① Power : Use to power On / Off.

② ▼▲ : Raises or lowers temperature and/ or sleep (off) time.

③ Cool : Use to select cooling mode.

④ Low Mode : Controls fan low speed.

⑤ High Mode : Controls fan high speed.

⑥ Off Timer : To set the length of time, once turned on, that you wish the cooler to run for. You can set 0~24 hours. Time intervals are 30mins. up to 10 hours and then 1 hour between 10 and 24 hours.

⑦ Remote : From the long distance, you can control the machine by wired remote control.

⑧ Room : If the LED is On, the displayed temperature is for Room temp. If the LED is Off, the displayed temperature is for spot temp.

⑨ Comp. : When the compressor is operating, the LED is On.

⑩ Error : Error signal (E1 : High Pressure, E2 : Low Pressure, E3 : Sensor, AF: Eva Freezing)

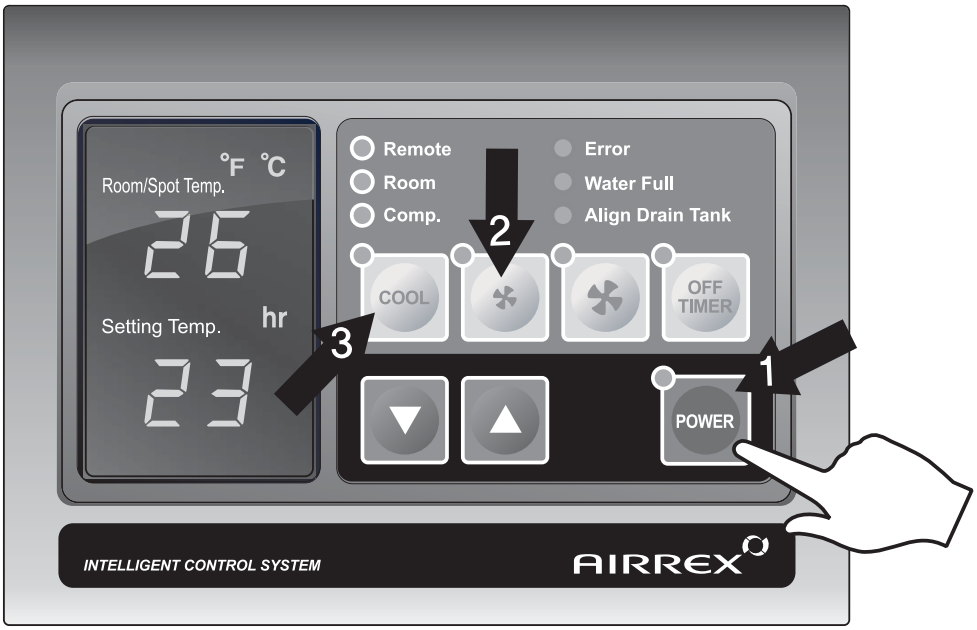
⑪ Water Full : Red light indicates 'Tank Full'. The compressor will shut off automatically. Empty tank and replace in position to resume operation.

⑫ Align Drain Tank : The red light indicates the water tank is not in the correct position.

⑬ Display : Display Room/Spot temperature, and the setting temp and sleep time in case of setting them. When the user set the sleep timer, 'hr' will be turned on.
(Display of 'LO' : under the 0℃, Display of 'HI' : over the 50℃)

OPERATION

RUNNING & STOP



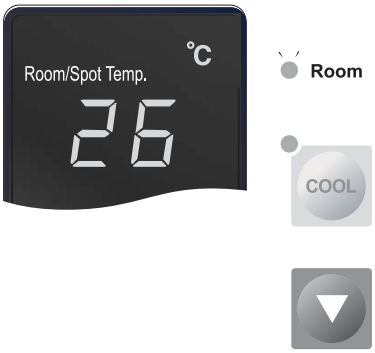
1. START BY PRESSING THE 'POWER' BUTTON.
   · Cooler will start up automatically.
   · To STOP the unit, press the 'POWER' button once again.

2. To change fan speed, press the 'Low' button.

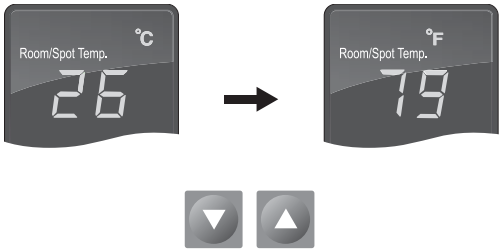
3. If you wish to operate on fan only, press the 'COOL' button. To resume cooling, press the 'COOL' button again.
   (Note : There is a 3 minute delay when switching functions to protect the compressor)

SELECTION of AREA/ROOM or SPOT COOLING

To reduce the temperature of the entire room then select 'Room/Area Cooling'.
For 'targeted' cooling of machinery, servers, or people etc. select 'Spot Cooling'.



1. IF YOU WANT TO DISPLAY ROOM TEMPERATURE, PUSH COOL AND ▼ BUTTON SIMULTANEOUSLY FOR THREE SECONDS.



2. IF YOU WANT TO SWITCH FROM CENTIGRADE TO FAHRENHEIT – PUSH (UP) ▲ AND (DOWN) ▼ BUTTON SIMULTANEOUSLY FOR 3 SECONDS.

TEMPERATURE CONTROL OPERATION

1. When power is on, the set temperature is displayed.
   Default of set temperature is 5℃.

2. When you push either (up) ▲ or (down) ▼ button, the setting temperature can be changed.

3. The display showing the set temperature will blink 3 times.

4. Limits of Room/Spot and Setting temperatures.

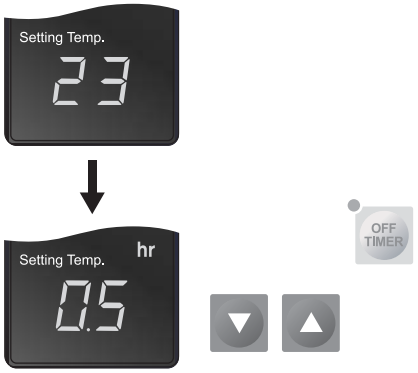
Room/Spot Temp.	Setting range
0℃ – 50℃	1℃ – 30℃

Cooling operates when
Room/Spot temperature is more than set temperature.

Cooling stops when
Room/Spot temperature is less than set temperature.

HOW TO SET THE 'OFF'TIMER.

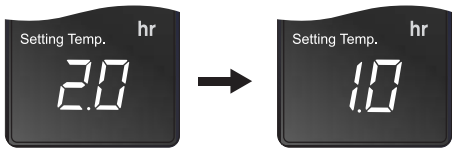
This function enables you to set the length of time you want the cooler to operate.
You can set the time period from 30min. to 24 hours in 30min. and 1 hour increments.



1. When cooler is operating, press the 'off timer' button and set the length of time you want by pressing ▲ or ▼.
   Each time you press the button you will increase the 'time to off' period by 30mins. up to 10 hours, and 1 hour thereafter up to 24 hours.
   The display will show .5 for 30min and 1 for an hour.
   e.g. 1 1/2 hours will be shown as 1.5.

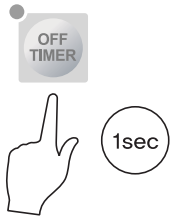
OFF TIMER LAMP IS ON

2 .When you have finished setting the time period, the 'off timer' lamp will illuminate, which indicates the cooler is in sleep (off timer) mode.



AFTER 1hr

3. If you press the 'off timer' button during its operation, the remaining time will be shown.



4. To CANCEL timing, press 'off timer' button for ONE second. It will then switch the timer off automatically.

'ERROR'and WARNING INDICATORS

The machine's safety devices will automatically signal any problems via the display window on the control panel.
The information below shows how to read these signals.

Water Full

1. WATER FULL– Display shows "FU"

When the water container is full, "FU" is displayed and the LED "Water Full" illuminate.

Align Drain Tank

2. ALIGN WATER TANK

If the water tank is not positioned correctly, the LED "Align Drain Tank" illuminate.

Error

3. HIGH PRESSURE

'E1' is displayed and the 'Error' LED will be on when the pressure of the compressor is too high and the high pressure switch is open.

Error

4. LOW PRESSURE

'E2' is displayed and the 'Error' LED will be on when the pressure of the compressor is too low.

Error

5. SENSOR PROBLEM

If the thermistor is short circuited or cut, 'E3' is displayed and the 'Error' LED will be on.

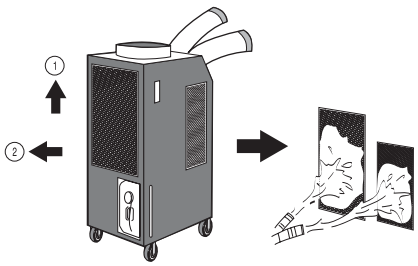
Error

6. ANTI FREEZING

When the temperature of the evaporator is below –4℃, 'AF' is displayed and the 'Error' LED will be on.

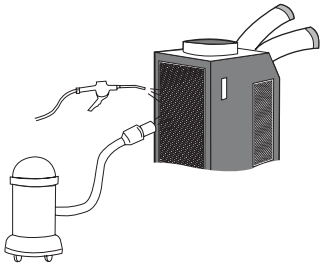
CLEANING AND MAINTENANCE

CLEANING THE AIR FILTERS



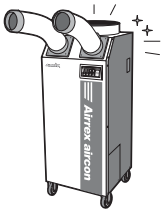
1. To remove filters, slide up a little ① and pull towards you ②.

2. Clean the filters with water or compressed air.

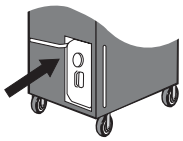


3. Clean evaporator and condenser units with a vacuum cleaner or compressed air.

MAINTENANCE



1. After cleaning, completely dry the inside of the unit by operating on 'Fan Mode' only for 3 to 4 hours.



2. Turn "OFF" at control panel, remove plug from socket. Coil and store cable neatly.

3. Keep machine suitably covered to prevent damage by damp, humidity and dust.

TROUBLE SHOOTING

TROUBLE	CHECK	REMEDY
NOT WORKING	● Power plug correctly connected	● Connect plug correctly
	● POWER button "OFF"	● Press POWER button to "ON"
	● Blown fuse in mains plug	● Replace fuse (MUST BE 13amp.)
	● Fuse (supply) blown	● Exchange fuse in board
	● Breaker on switch board tripped	● Check load capacity and reset
	● Ambient temp. too high	● Use only below 45℃ (HSC-3500 : 40℃)
POOR COOLING	● Filter blocked with dust	● Clean Filter
	● Dust in heat exchanger	● Clean heat exchanger
	● Obstacle against inlet side	● Remove and allow 50cm.clearance
	● Ambient temp. too high	● Use only below 45℃ (HSC-3500 : 40℃)
E1 (High Pressure)	● Motor outdoor is not operated	● Check the power supply or replace the motor (by authorised service personnel only)
	● Hot air from chamber is not blown out completely	● Make good condition to blow out hot air
E2 (Low Pressure)	● Refrigerant is leaked. Check with manifold gauge	● Supply optimum refrigerant and check the leakage (by authorised service personnel only)
E3 (Sensor Problem)	● Thermistor sensor wire is cut	● Change the thermistor sensor
AF (Anti Freezing)	● Evaporator is frozen (Ambient temp. is under 20℃)	● Operate continuously till "AF" disappeared or operate in "FAN" mode

ACCESSORIES

ITEM				MODEL	DRAWING
				HSC-2500 / HSC-3500	
COLD AIR OUTLET	DUCT	Diam. 125mm	0.5m	☑	
			3m	option	
	DUCT COVER (FINISHING COLLAR)			☑	
	DAMPER BASE (FLOW CONTROL)			☑	
	ALUMINIUM FILTER CASSETTE			☑	
HOT AIR EXHAUST	REDUCER	REDUCES EXH. DUCT FROM 43cm to 30cm		option	
	ALUMINIUM FILTER CASSETTE			☑	

SPECIFICATIONS

		HSC-2500	HSC-3500
Cooling Capacity	BTU/h kW.	21,000 (6.15)	25,000 (7.33)
Power Supply		230V. 50Hz. 1Ph.	
Dimensions	mm.	490 X 600 X 1,303	
Weight	kg.	86	90
Evaporator Air Flow	ft^3/min (m^3/min)	459 (11-13)	565 (14-16)
Noise Level (at 1m.)	dB	68	69
Power Consumption	kW.	2.41	2.6
Current Consumption	Amp.	11	13
Refrigerant(R-407C)	grm	890	1,150
Air Filter		Aluminium Mesh Cartridge	
Safety Devices		▸ High Pressure Switch ▸ Fan motor protection ▸ 3 min. delay timer. ▸ Tank position indicator. ▸ Thermostat and relief valve for compressor ▸ Auto 'Full Tank' shut off.	
Power Cable	Fitment	13 Amp. Fused 3 Pin Plug Top.	
	Length	3 meters	
Operating Range		18℃ to 45℃ (HSC-3500 : 18℃ to 40℃)	
High Pressure	kgf/cm^2	26	
Low Pressure	kgf/cm^2	5	
Max. Duct Length (Either hot or cold, not both together in use)	Cold Duct(m)	9	12
	Hot Duct(m)	Optional	
Fuse in power box in Machine body		250 Va.c. 5amp.	